

1 CLAIMS

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5 1. A fluid cooled air conditioning system, comprising:
6 a first valve fluidly connected to a chilled fluid supply providing a chilled fluid;
7 a main cooling unit fluidly connected to said first valve;
8 a precooling unit, wherein said precooling unit is positioned to receive return
9 air prior to said main cooling unit; and
10 a second valve fluidly connected between said main cooling unit and a chilled
11 fluid return and said precooling unit, wherein said second valve directs said chilled
12 fluid to said precooling unit during periods of high cooling requirements and wherein
13 said second valve diverts said chilled fluid to said chilled fluid return during periods of
14 normal cooling requirements.

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17 2. The fluid cooled air conditioning system of Claim 1, wherein said second
18 valve is a three-way valve.

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21 3. The fluid cooled air conditioning system of Claim 2, wherein said periods of
22 high cooling requirements occur when a room temperature exceeds 75 degrees
23 Fahrenheit.

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26 4. The fluid cooled air conditioning system of Claim 1, including a control unit
27 in communication with said first valve and said second valve, wherein said control unit
28 controls said first valve and said second valve.
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5. A method of operating a fluid cooled air conditioning system, comprising the steps of:

- (a) providing a chilled fluid to a main cooling unit; and
- (b) directing chilled fluid from said main cooling unit to a precooling unit if a room temperature is greater than a set point.

6. The fluid cooled air conditioning system of Claim 5, wherein said set point is 75 degrees Fahrenheit.

7. The fluid cooled air conditioning system of Claim 5, wherein said precooling unit receives a flow of return air and wherein said main cooling unit receives a flow of precooled air from said precooling unit.